

WATER QUALITY

Most of the rules summarized below are simplified and are not complete. All of the chapters are hyperlinked for the reader's convenience to review rules in their entirety if desired. Please note, rules marked with an asterisk (*) pertain to water quality protection and have been adopted by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.

Chapter 222-10 WAC, State Environmental Policy Act Guidelines

WAC 222-10-010 Policies and authorities.

- A forest practices application or notification that requires a threshold determination will be conditioned when necessary to mitigate specific adverse impacts identified in environmental documents prepared under SEPA.
- An application or notification will be disapproved when the proposal would result in significant adverse impacts identified in a final or supplemental environmental impact statement prepared under SEPA, and reasonable mitigation measures are insufficient to mitigate the identified impacts and denial is consistent with all provisions of (the authority granted in RCW 76.09.010 and the SEPA law and rules.)

Chapter 222-12 WAC, Policy and Organization

The policies in this section all apply to biomass harvest. These may be of particular interest:

WAC 222-12-010 Authority: Promulgation of all forest practices rules shall be accomplished so that compliance with such forest practices rules will achieve compliance with the water quality laws.

WAC 222-12-040 Alternate plans—Policy: All forest practice operations must comply with both the act and the rules promulgated pursuant to the act, unless an alternate plan has been approved by the department.

WAC 222-12-045 Adaptive Management Program: (1) **Purpose:** The purpose of the program is to provide science-based recommendations and technical information to assist the board in determining if and when it is necessary or advisable to adjust rules and guidance for aquatic resources to achieve resource goals and objectives. The board may also use this program to adjust other rules and guidance. The goal of the program is to affect change when it is necessary or advisable to adjust rules and guidance to achieve the goals of the forests and fish report or other goals identified by the board. There are three desired outcomes: Certainty of change as needed to protect targeted resources; predictability and stability of the process of change so that landowners, regulators and interested members of the public can anticipate and prepare for change; and application of quality controls to study design and execution and to the interpreted results.

WAC 222-12-050 Notices to comply—stop work orders and WAC 222-12-070 Enforcement policies *These WACs explain enforcement policies – see detail under Chapter 222-46 WAC in this document.*

Chapter 222-16 WAC, Definitions

WAC 222-16-010, General Definitions.

"Equipment limitation zone" means a 30-foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns Water. It applies to all perennial and seasonal nonfish bearing streams.

"Erodible soils" means those soils that, when exposed or displaced by a forest practices operation, would be readily moved by water.

"Identified watershed processes" means the following components of natural ecological processes that may in some instances be altered by forest practices in a watershed:

- Mass wasting;
- Surface and road erosion;
- Seasonal flows including hydrologic peak and low flows and annual yields (volume and timing);
- Large organic debris;
- Shading; and
- Stream bank and bed stability.

"Riparian function" includes bank stability, the recruitment of woody debris, leaf litter fall, nutrients, sediment filtering, shade, and other riparian features that are important to both riparian forest and aquatic system conditions.

"Sensitive sites" are areas near or adjacent to Type Np Water and have one or more of the following:

- 1) **Headwall seep** is a seep located at the toe of a cliff or other steep topographical feature and at the head of a Type Np Water which connects to the stream channel network via overland flow, and is characterized by loose substrate and/or fractured bedrock with perennial water at or near the surface throughout the year.
- 2) **Side-slope seep** is a seep within 100 feet of a Type Np Water located on side -slopes which are greater than 20 percent, connected to the stream channel network via overland flow, and characterized by loose substrate and fractured bedrock, excluding muck with perennial water at or near the surface throughout the year. Water delivery to the Type Np channel is visible by someone standing in or near the stream.
- 3) **Type Np intersection** is the intersection of two or more Type Np Waters.
- 4) **Headwater spring** means a permanent spring at the head of a perennial channel. Where a headwater spring can be found, it will coincide with the uppermost extent of Type Np Water.
- 5) **Alluvial fan** means a depositional land form consisting of cone-shaped deposit of water-borne, often coarse-sized sediments.
 - a) The upstream end of the fan (cone apex) is typically characterized by a distinct increase in channel width where a stream emerges from a narrow valley;
 - b) The downstream edge of the fan is defined as the sediment confluence with a higher order channel; and
 - c) The lateral margins of a fan are characterized by distinct local changes in sediment elevation and often show disturbed vegetation.

Alluvial fan does not include features that were formed under climatic or geologic conditions which are not currently present or that are no longer dynamic.

"Water bar" means a diversion ditch and/or hump in a trail or road for the purpose of carrying surface water runoff into the vegetation duff, ditch, or other dispersion area so that it does not gain the volume and velocity which causes soil movement and erosion.

Chapter 222-24 WAC, Road Construction and Maintenance

WAC 222-24-010 Policy.

- 1) A well designed, located, constructed, and maintained system of forest roads is essential to forest management and protection of the public resources...
- 2) To protect water quality and riparian habitat, roads must be constructed and maintained in a manner that will prevent potential or actual damage to public resources. This will be accomplished by constructing and maintaining roads so as not to result in the delivery of sediment and surface water to any typed water in amounts, at times or by means, that preclude achieving desired fish habitat and water quality ...
- 3) Extra protection is required during road construction and maintenance to protect public resources and timber growing potential ...

WAC 222-24-026 Temporary roads.

- 1) Constructed to facilitate closure and abandonment.
- 2) Designed to provide same level of public resource protection as provided by rules.
- 3) Identified on FPA and abandonment date.

WAC 222-24-052 Road maintenance.

- 1) Forest roads... To the extent necessary to prevent potential or actual damage to public resources, the following maintenance shall be conducted on forest roads, except as addressed in subsections (5) and (6) of this section:
 - a) Drainage structures shall be kept functional.
 - b) Ground water that has been captured by ditchline must be diverted onto stable portions of the forest floor by using ditchouts, culverts or drivable dips.
 - c) Road surface must be maintained as necessary to:
 - i) Minimize erosion of the surface and the subgrade; and
 - ii) Minimize direct delivery of surface water to typed water; and
 - iii) Minimize sediment entry to typed water; and
 - iv) Direct any ground water that is captured by the road surface onto stable portions of the forest floor.
 - d) During and on completion of the following operations, the road surface shall be crowned, outsloped, or water barred and berms removed from the outside edge except those intentionally constructed for protection of fills:
 - i) Log, pulp, chip, or specialized forest product haul;
 - ii) Rock haul; and
 - iii) Road building.
 - e) Before the first winter rainy season following termination of operations, drainage structures must be cleared and the road surface must be crowned, outsloped, water barred or otherwise left in a condition which prevents accelerated erosion, interruption of water movement within wetlands, mass wasting, or direct delivery of water or sediment to a typed water. (See the board manual section 3 for specific guidance.)

- f) Thereafter, except as provided in (d) of this subsection, the landowner must clear or repair ditches or drainage structures that are known or should be known to be nonfunctional and causing or likely to cause material damage to a public resource.
 - g) The landowner will not be liable for penalties or monetary damages, under the act, for damage occurring from a condition brought about by public use, unless the landowner fails to make repairs as directed by a notice to comply.
 - h) During the regular course of road maintenance on stream-adjacent parallel roads, down wood that is blocking vehicle passage shall be placed on the side of the road closest to the adjacent water.
- 2) **Additional drainage structure maintenance.** If the department determines, based on a field inspection and physical evidence, that the above road maintenance has been or will be inadequate to protect public resources, and that additional measures will provide adequate protection, the department will require the landowner or operator to install additional or larger drainage structures or other drainage improvements identified as necessary by the department.
- 3) **Abandoned roads.** An abandoned road is a road which the forest landowner has abandoned in accordance with procedures of (a) through (e) of this subsection. Roads are exempt from maintenance under this section only after (e) of this subsection is completed.
- a) Roads are outsloped, water barred, or otherwise left in a condition suitable to control erosion and maintain water movement within wetlands and natural drainages;
 - b) Ditches are left in a suitable condition to reduce erosion;
 - c) The road is blocked so that four wheel highway vehicles cannot pass the point of closure at the time of abandonment;
 - d) Water crossing structures and fills on all typed waters are removed, except where the department determines other measures would provide adequate protection to public resources; and
 - e) The department shall determine whether the road has been abandoned according to procedures of this subsection. If the department determines the road is properly abandoned, it must notify the landowner in writing within thirty days that the road is officially abandoned.
- 4) **Orphaned roads.** An orphaned road is a road or railroad grade that the forest landowner has not used for forest practices activities since 1974. Many of these roads are overgrown or closed off, but have not satisfied the abandonment process.
- a) An inventory and assessment, of the risk to public resources, or public safety must be completed by the landowner in conjunction with the road maintenance and abandonment plan.
 - b) Five years after the effective date of this rule, when the extent of any problems associated with the orphaned roads is known, the hazard-reduction statute will be evaluated to determine if it is still needed and if funds for cost-sharing are needed to effect repair or abandonment of orphan roads. See RCW 76.09.300.
 - c) Landowners are not obligated under this rule to repair or abandon such roads before the end of the five year period, but they can voluntarily take this action.
- 5) **Brush control.** Chemical control of roadside brush will be done in accordance with WAC 222-38-020.
- 6) **Road surface treatment.**
- a) Apply oil to the road surface only when the temperature is above 55 degrees F and during the season when there is a minimal chance of rain for the next 48 hours. Use of waste oil is subject to RCW 70.95I.060(5).
 - b) Water the road surface prior to application of oil to assist in penetration.

- c) Construct a temporary berm along the road shoulder wherever needed to control runoff of the applied chemical.
- d) Take extreme care to avoid excess application of road chemicals. Shut off the flow at all bridges.
- e) Dispose of the rinse water fluids on the road surface or in a place safe from potential contamination of water when cleaning out chemical storage and application equipment tanks used for storage and application of road treatment materials.
- f) Comply with WAC 222-38-020 when using dry road chemicals.

Chapter 222-30 WAC, Timber Harvesting

Per WAC 222-30-010, “This chapter covers all removal of timber for commercial operations, commercial thinning, salvage of timber, relogging merchantable material left after prior harvests, postharvest cleanup, clearing of merchantable timber from lands being converted to another use. It does not cover removal of incidental vegetation or removal of firewood for personal use.”

WAC 222-30-020 Harvest unit planning and design.

- Logging systems should be appropriate for terrain, soils, and timber type so that yarding or skidding can be economically accomplished and achieve the ecological goals of WAC [222-30-010](#) (2), (3) and (4) in compliance with these rules.
- Landing location should be located to prevent damage to public resources. Avoid excessive excavation and filling.
- RMZs and riparian leave tree areas are detailed in WAC 222-30-021 and -022.
- Forested wetlands:
 - Harvest methods shall be limited to low impact harvest or cable systems. Where feasible, at least one end of the log shall be suspended during yarding. (Note: “low impact harvest” is defined in WAC 222-16-010: “... means use of any logging equipment, methods, or systems that minimize compaction or disturbance of soils and vegetation during the yarding process. The department shall determine such equipment, methods or systems in consultation with the department of ecology.”)
 - Where riparian associated wetlands are present in the outer zone of a RMZ, trees may be left in the zone to maximize wetland function. See WAC [222-30-021](#) *(1)(c)(ii).
- Wetland management zones (WMZs): dependent on whether wetland includes bogs, and size (acres) of wetland.
 - Leave trees 75 trees per acre greater than 6 inches (W. WA) and greater the 4 inches dbh (E. WA)
 - Leave wildlife reserve trees where feasible.
 - Leave all cull logs on site.
 - Max width of openings not to exceed 100 feet.
 - Openings shall be no closer than 200 feet.
 - No tractor, wheeled skidders, other ground based harvesting systems in WMZ without DNR approval.
- Type A and B Wetlands:
 - Leave individual trees in Type A or B wetland, or trees of forested wetlands areas less than 0.5 acre; can be counted toward WMZ requirement.
 - DNR-approved plan required for harvest of upland areas or forested wetlands surrounded by Type A or B wetlands.

- No harvest allowed within Type A or B wetland that meets the definition of a bog.
- Channel migration zones. No harvest, construction or salvage within CMZ, except road crossings and creation and use of yarding corridors.
- Bankfull width. No harvest, construction or salvage within the bankfull width of any Type S or F Water or any buffered length of Type Np Water, except for the construction and maintenance of road crossings in accordance with applicable rules and creation and use of yarding corridors.

WAC 222-30-021 Western Washington riparian management zones.

Type S and F Waters

The shade requirements in WAC 222-30-040 must be met regardless of harvest opportunities provided in the inner zone RMZ rules.

RMZs are 90-200 feet wide depending on site class and stream width.

- Core zone: 50 foot no harvest.
- Inner zone 10-100 feet wide depending on site class and stream width. Harvest must meet stand requirement to "...protect aquatic resources and related habitat to achieve restoration of riparian function, and the maintenance of these resources once they are restored" (WAC 222-30-010(2))
 - Option 1, Thinning from below.
 - Must retain ≥ 57 trees per acre
 - Option 2, Leaving trees closest to the water.
 - Streams ≤ 10 feet bankfull width. No harvest permitted within 30 feet of core zone.
 - Streams > 10 feet bankfull width. No harvest permitted within 50 feet of core zone. for large streams.
- Outer zone:
 - 22-67 feet wide depending on site class and streams width;
 - Must leave 20 trees per acre.

Type Np and Ns Waters

- Equipment limitation zone: 30 feet wide to limit surface disturbances caused by equipment.
- On-site mitigation is required if any of the following activities exposes the soil on more than 10 percent of the surface area of the zone.
 - Ground based equipment;
 - Skid trails;
 - Stream crossings, other than existing roads; or
 - Cabled logs that are partially suspended.
- Mitigation must be designed to replace the equivalent of lost functions especially prevention of sediment delivery. Examples include water bars, grass seeding, mulching, etc. **DNR is authorized to prevent actual or potential material damage to public resources under WAC 222-46-030 or -040 (notice to comply and stop work order) to condition FPAs.**

- Sensitive site and RMZ protection.
 - 50 foot no-harvest buffer along each side of Type Np Water; at least 50 percent if stream length must be protected by buffers on both sides. Buffered segments must be at least 100 feet in length.
 - No harvest permitted:
 - within 50 of outer perimeter of a soil zone perennially saturated from a headwall seep or side-slope seep;
 - within 56 foot radius buffer patch centered intersection of 2 or more Type Np Waters, or centered on a headwater spring or point at the uppermost extent of a Type Np Water;
 - on an alluvial fan.
 - None of the limitation on harvest in or around sensitive sites will preclude or limit construction or maintenance of roads for the purpose of crossing streams, or the creation and use of yarding corridors.
 - To the extent reasonably practical, the operation will both avoid creating yarding corridors or road crossings through Type Np RMZs or sensitive sites and associated buffers, and avoid management activities which would result in soil compaction, the loss of protective vegetation or sedimentation in perennially moist areas.
 - Where yarding corridors or road crossings through Type Np Water RMZs or sensitive sites and their buffers cannot reasonably be avoided, the buffer area must be expanded to protect the sensitive site by an area equivalent to the disturbed area or by providing comparable functions through other management initiated efforts.

WAC 222-30-022 Eastern Washington riparian management zones.

The shade requirements in WAC 222-30-040 must be met regardless of harvest opportunities provided in the inner zone RMZ rules.

RMZs are 75-130 feet wide depending on site class and stream width.

Type S and F Waters

Permitted harvest varies by timber habitat type and site class

- Core zone: 30 foot no harvest buffer.
- Inner zone 45 or 70 feet depending on stream width (≤ 15 feet or > 15 feet).
 - Permitted harvest depends on inner zone basal area;
 - Required leave trees depends on existing stand density in the inner zone and timber habitat type (Ponderosa pine, mixed conifer, high elevation); generally, 50 trees per acre for stands with high basal area and 100-120 trees per acre for stands with low basal area and high density.
- Outer zone: 0-55 feet depending on site class and stream width.

Type Np Waters

- Equipment limitation zone: 30 feet wide. Mitigation required if harvest activities expose the soil on more than 10 percent of the equipment limitation zone length. **DNR authorized to prevent actual or potential material damage to public resources under WAC 222-46-030 or -040 or any related authority to condition FPAs.**

- Harvest may occur within 50 feet of stream; must choose either partial cut strategy or clearcut strategy.
 - Partial cut:
 - Required leave trees generally 50 trees ≥ 10 inches dbh. Leave tree selection based on priority: bank stability, shade to water, lean toward water, preferred species defined in WAC 222-16-010, or evenly distributed.
 - Side slope seeps must be protected with 50-foot partial cut buffer.
 - Clearcut:
 - 2-sided 50 foot no harvest buffer.
 - No harvest within 50 feet of sensitive sites: soil perennially saturated from a headwall seep, side slope seep, headwater spring, alluvial fan, intersection of two or more Type Np Waters.

WAC 222-30-023 Riparian management zones for exempt 20-acre parcels.

(landowners with total parcel ownership of less than 80 forested acres)

- RMZ buffers Western Washington
 - Type S and F Water:
 - Must meet shade requirements in WAC 222-30-040.
 - 29-115 foot buffer depending on stream size.
 - Leave tree ratio conifer/deciduous depends on stream size, and number of trees retained per 1000 feet on each side of the stream depends on gravel size (gravel/cobble < 10 inch diameter or boulder/bedrock ≥ 10 inch diameter)
 - Type Np Water:
 - Where DNR requires trees to be left to protect public resources:
 - 29 foot buffer
 - leave trees are ≥ 29 conifer or deciduous, ≥ 6 inches diameter, each side of every 1000 feet of stream length
- RMZ buffers Eastern Washington
 - Type S and F Water:
 - Must meet shade requirements in WAC 222-30-040.
 - Buffer width based on adjacent harvest type, defined in WAC 222-16-010 “Partial cutting”
 - When adjacent harvest type is partial cutting, buffer must average 35-58 feet wide.
 - Leave tree counts depend on size available, wildlife reserve trees available.
Minimums:
75 per acre ≤ 4 inches diameter, boulder/bedrock stream bed.
155 per acre ≤ 4 inches diameter, gravel/cobble stream bed.
 - Type Np Water (same as for Western Washington)
 - Where DNR requires trees to be left to protect public resources:
 - 29 foot buffer
 - leave trees are ≥ 29 conifer or deciduous, ≥ 6 inches diameter, each side for every 1000 feet of stream length

The rest of the rules in chapter 222-30 WAC are for both Western and Eastern Washington.

WAC 222-30-030 Stream bank integrity.

Within riparian management zones of Type S, F, and Np Waters, operators must:

- Avoid disturbing brush and similar understory vegetation;
- Avoid disturbing stumps and root systems and any logs embedded in the bank;
- Leave high stumps where necessary to prevent felled and bucked timber from entering the water;
- Leave trees that display large root systems embedded in the bank.

WAC 222-30-040 Shade requirements to maintain water temperature.

- Type S and F Waters.
- Bulltrout overlay: All available shade retained within 75 feet from stream.
- Outside bulltrout overlay: If a landowner elects to remove any tree within 75 feet of stream, must demonstrate would not be contrary to satisfy shade requirement, by using temperature prediction method in Board Manual Section 1.

WAC 222-30-045 Salvage logging within RMZ

- No salvage in any typed water.
- No salvage in core zone.
- Inner zone: permissible if stand requirements can be met by the residual stand and meets Westside/Eastside down wood guidelines.
- Outer zone: permissible if riparian leave tree requirements can be met of the residual standing or down trees. Only down wood not needed to meet riparian leave tree requirements in outer zone may be salvaged.

WAC 222-30-060 (4) Cable yarding in RMZs, sensitive sites, and WMZs

(in part) Reasonable care shall be taken to minimize damage to the vegetation providing shade to the stream or open water areas and to minimize disturbance to understory vegetation, stumps and root systems.

WAC 222-30-070 Ground-based logging systems

- **Type S or F Water:** no ground-based equipment allowed except with DNR approval and an HPA.
- **Type Np and Ns Waters**
 - ground based transport of logs is not allowed across flowing water.
 - whenever skidding across Type Np or Ns Waters, the direction of the log movement between stream banks shall be designed to minimize potential for damage to public resources.
 - to maintain wetland water movement and water quality, and to prevent soil compaction, ground-based logging systems shall not be used in Type A or B wetlands.
- **Wetlands:**
 - No equipment allowed in Type A or B wetlands.

- Where harvest in wetlands is permitted, ground-based logging systems limited to low impact harvest systems; only allowed during periods of low soil moisture or frozen soil conditions.
- **RMZs:** any use of ground-based yarding equipment within zone must
 - be approved by DNR;
 - minimize routes through zone;
 - minimize damage to leave trees and vegetation in the zone to the extent practical and consistent with good safety practices.
- **WMZs:**
 - where feasible logs shall be skidded with at least one end suspended from the ground so as to minimize soil disturbance and damage to leave trees and vegetation in the WMZ;
 - ground-based harvesting systems shall not be used within the minimum WMZ unless DNR approved.
- **Deadfalls:** logs firmly embedded in the bed or bank of Type S or F Waters shall not be removed or disturbed without HPA.
- **Moisture conditions:**
 - Systems shall not be used on exposed erodible soils or saturated soils if sediment delivery is likely to disturb a wetland, stream, lake or pond.
- **Skid trail location and construction:**
 - Shall be kept to the minimum width.
 - Reasonable care shall be taken to minimize the amount of sidecast required and shall only be permitted above the 100-year flood level.
 - Shall be outsloped where practical, but be insloped where necessary to prevent logs from sliding or rolling downhill off the skid trail.
 - Skid trails running parallel or near parallel to streams shall be located outside the no-harvest zone of all typed waters and at least 30 feet from the outer edge of the bankfull width of the unbuffered portions of Type Np or Ns Water unless approved in writing by the department.
 - Skid trails shall cross the drainage point of swales at an angle to minimize the potential for delivering sediment to a typed water or where channelization is likely to occur.
- **Skid trail maintenance.**
 - Upon completion of use and termination of seasonal use, skid trails on slopes in exposed soils shall be water barred where necessary to prevent soil erosion.
 - Skid trails located within 200 feet horizontal distance of any typed water that directly delivers to the stream network shall use water bars, grade breaks, and/or slash to minimize sediment delivery to the stream. Water bars shall be placed at a frequency to minimize gullying and soil erosion. In addition to water barring, skid trails with exposed soil that is erodible and may be reasonably expected to cause damage to a public resource shall be seeded with a noninvasive plant species (preferably a species native to the state) and adapted for rapid revegetation of disturbed soil, or treated with other erosion control measures acceptable to the department.
- **Slope restrictions.** Ground-based systems shall not be used on slopes where in the opinion of the department this method of operation would cause actual or potential material damage to a public resource.

WAC 222-30-080 Landing cleanup.

Except as approved by the department, the following rules shall be met within 60 days after completion of hauling logs from any landing, or as soon thereafter as practical.

(1) Drainage.

- (a) Clean any ditches and culverts obstructed by dirt or debris during operation(s).
- (b) Establish a slope that will prevent water from accumulating on the landing or running from the landing down any erodible fill.

(2) Other erosion control measures.

- (a) Cut slopes shall be cut back to an angle expected to remain stable.
- (b) Where exposed soil is unstable or erodible and may be reasonably expected to cause damage to a public resource, it shall be seeded with grass, clover or ground cover or compacted, riprapped, water barred, benched or mulched, or be treated by other means approved by the department.

(3) Cleanup.

- (a) Slash accumulations which would prevent reforestation of otherwise plantable fills, sidecast or cut slopes of landings shall be disposed of or be piled on the landing floor for future disposal.

(b) Slash shall not be buried in any filled portion of the landing in connection with landing cleanup operations.

(c) All cables, machine parts and other inorganic debris resulting from harvest operation(s) shall be removed at the time of landing cleanup.

WAC 222-20-110 Timber harvesting on islands.

Landowners are not allowed to clearcut more than 40 contiguous acres of forest land.

- Clearcuts remain in clearcut condition until it reaches canopy closure or has been reforested for at least ten years.
- Within 200 feet of saltwater, only selective harvest allowed – no more than 30 percent of merchantable trees in any 10 year period (there are further caveats).
- This section does not apply to harvest or salvage of trees damaged by wind, disease, insects, fire, or other natural causes.

WAC 222-34-040 Site preparation and rehabilitation.

(1) **Heavy equipment.** Heavy equipment shall not be used in connection with site preparation or rehabilitation work:

(a) When, because of soil moisture conditions or the type of soils, undue compaction or unnecessary damage to soil productivity would occur or erosion would result in damage to water quality; or

(b) Within riparian management zones, Type A and B Wetlands, wetland management zones, or within equipment limitation zones of Type Np and Ns Waters on slopes of 30 percent or less. On slopes greater than 30 percent heavy equipment shall not operate within 50 feet of Type S through Ns Waters unless a site specific plan has been approved by the department.

(2) Surface water drainage. Where site preparation or rehabilitation involves contouring or terracing of slopes, drainage ditches, or similar work:

(a) The gradient of ditches or other artificial water courses in erodible soils shall not cause significant stream, lake, pond, or wetland siltation.

- (b) Ditches and other artificial water courses shall not discharge onto any road, landing or fill.
- (c) Ditches and other artificial water courses shall not be constructed to discharge onto the property of other parties without their consent.

Chapter 222-46 WAC, Consultation and Enforcement

WAC 222-46-020 Informal conferences.

DNR shall allow for reasonable opportunities to discuss proposed enforcement actions unless DNR determines there may be imminent damages to the public resource.

WAC 222-46-030 Notice to comply.

If a violation, a deviation, material damage or potential for material damage to a public resource has occurred and the department determines that a stop work order is unnecessary, then the department shall issue and serve upon the operator and/or landowner a notice.

WAC 222-46-040 Stop work order.

If the following occurs, DNR shall serve a stop work order which shall be a final order of the department:

- Violation of the provisions of the Forest Practices Act or rules; or
- Deviation from the approved application; or
- Immediate action is necessary to prevent continuation of or to avoid material damage to a public resource.

WAC 222-46-050 Corrective action.

- If operator fails to undertake and complete any required course of action, DNR may determine cost and give written notice to operator, timber owner, landowner.
- If failure to undertake course of action within 30 days, DNR undertakes the course of action and responsible party is liable for costs.
- If not paid within 60 day after DNR takes course of action, such amount to become a lien on forest land and DNR may collect in the same manner provided for in chapter 60.04 RCW for mechanics' liens.
- Immediate corrective action: If operator has failed to obey a stop work order, DNR may take immediate corrective action to prevent continuation of or avoid material damage to public resources.

Chapter 222-50 WAC, Relationship to Other Laws and Regulations

WAC 222-50-010 Policy.

A major policy of the Forest Practices Act and the board is to work toward a comprehensive, statewide system of laws and rules provide for interagency input and cooperation to the extent that can be accomplished without interfering with the authority of the affected federal, state, regional and local agencies.

WAC 222-50-020 Other agency requirements.

(1) Many other laws and rules apply to the conduct of forest practices. Other agencies administer some of these other regulatory programs. Permits may be required by such agencies

prior to the conduct of certain forest practices. The department will maintain a list for distribution of state, regional and local regulatory programs that apply to forest practices operations. Affected parties are urged to consult with the specified agencies and independent experts with respect to the regulatory requirements shown on the list.

(2) **Hydraulics project approval law**, chapter [77.55](#) RCW. A hydraulics project approval must be obtained from the department of fish and wildlife prior to constructing any form of hydraulic project or other work that will use, divert, obstruct, or change the natural flow or bed of any river or stream or that will utilize any of the waters of the state or materials from the stream beds. See chapter [77.55](#) RCW and WAC [232-14-010](#).

(3) **Compliance with the Shoreline Management Act**, chapter [90.58](#) RCW, is required. The Shoreline Management Act is implemented by the department of ecology and the applicable local governmental entity. A substantial development permit must be obtained prior to conducting forest practices which are "substantial developments" within the "shoreline" area as those terms are defined by the Shoreline Management Act.

(4) Nothing in these rules is intended to interfere with any authority of the department of fish and wildlife to protect wildlife under any other statutes or regulations, or under any agreements with landowners.

(5) Federal Endangered Species Act, 16 U.S.C. 1531 et seq., and other federal laws. The federal Endangered Species Act and other federal laws may impose certain obligations on persons conducting forest practices. Compliance with the Forest Practices Act or these rules does not ensure compliance with the Endangered Species Act or other federal laws.

WAC 222-50-030 Interagency agreements.

The board recommends that the department negotiate interagency agreements with other governmental agencies. The board further recommends that such agreements include, to the extent acceptable to the other agency, provisions specifying:

- (1) **The law** and rules covered;
- (2) **Any geographical** or other limits on the authority and responsibility under the agreement;
- (3) **Priorities** and standards for resolution of any conflicts between such laws and regulations and the act and these rules;
- (4) **Procedures** for administrative appeals of actions taken;
- (5) **Provisions for** continuing cooperation between the department and the other agency or agencies regarding interpretation of the laws and regulations involved;
- (6) **Procedures for** termination of the interagency agreement; and
- (7) **Procedures for** processing applications and notifications.

The department is directed to provide copies of all such agreements to the board, and to make known to the public that such interagency agreements exist.

WAC 222-50-040 Safety and health.

The forest practices rules contained in chapters [222-24](#) through [222-38](#) WAC are automatically superseded to the extent inconsistent with any applicable safety regulations, or with any orders or

directives having the force of law and based on any applicable safety regulations, including:

(1) **Chapter 296-54** WAC (safety standards for logging operations, department of labor and industry's division of safety).

(2) **Chapter 296-24** WAC (general safety and health standards, department of labor and industry's division of safety).

(3) **All applicable** Federal Occupational Safety and Health Administration regulations.

(4) **Regarding aircraft**, chapters [12-24](#), [12-28](#), and [12-32](#) WAC (Washington aeronautics commission).

(5) **Regarding explosives**, chapter [296-52](#) WAC (department of labor and industry) and all applicable federal regulations.

(6) **Regarding chemicals**, chapter [16-228](#) WAC (department of agriculture) and all applicable federal regulations.

(7) **All applicable** state and local sanitation regulations relating to municipal watersheds and sources of domestic water supply.

In such cases of conflict, the department is authorized to seek from other agencies such waivers or modifications in the applicable safety and health regulations as may be necessary for the department to be able to fully enforce the forest practices rules contained in chapters [222-24](#) through [222-38](#) WAC.

Applicants are cautioned that there may be additional safety and health laws and regulations that may be applicable in addition to those specifically listed above.

WAC 222-50-050 Forest fire prevention and suppression.

All laws and rules relating to forest fire prevention and suppression apply in addition to these forest practices rules and, in cases of conflict, supersede the forest practices rules contained in chapters [222-24](#) through [222-38](#) WAC.

WAC 222-50-060 Other regulatory programs administered by the department.

The board recommends that, to the extent permitted by law and when necessary the department adopt rules and policies under which approved applications and notifications can serve to eliminate or reduce the need for separate permits and approvals under regulatory programs administered by the department (such as the power driven machinery permits, RCW [76.04.275](#), dumping mill waste and forest debris permit, RCW [76.04.242](#), and surface mining permits, chapter [78.44](#) RCW) as applied to forest practices. The department is directed to notify the public of the existence of such rules and policies.